

## DEPARTMENT OF THE NAVY

OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON, DC 20350-2000

IN REPLY REFER TO

OPNAVINST 3430.23B OP-944

1 2 JUN 1992

## OPNAV INSTRUCTION 3430.23B

From: Chief of Naval Operations

Subj: TACTICAL ELECTRONIC WARFARE REPROGRAMMABLE LIBRARY (EWRL) SUPPORT PROGRAM

Ref: (a) OPNAVINST 9410.5 Data Base and Communication Standards
Interoperability Requirements for Tactical Naval
Warfare Systems (NOTAL)

(b) CNO ltr 2000 Ser 941C/1U552769 of 5 Aug 91
Implementation of Copernicus Architecture Requirements
Definition (NOTAL)

Encl: (1) EWRL Definitions

(2) EWRL Rapid Reprogramming(3) EWRL Program Sponsorship

(4) EWRL Program Functional Responsibilities

(5) EWRL Program Supported Systems

(6) EWRL Feedback Report

(7) EWRL Library Maintenance/Updates

- 1. <u>Purpose</u>. To issue responsibilities and procedures for defining, developing, maintaining, managing and distributing Electronic Warfare (EW) Reprogrammable Libraries for automated EW systems. This instruction has been substantially revised and should be read in its entirety.
- 2. <u>Cancellation</u>. OPNAVINST C3430.23A, report control symbol OPNAV 3430-2, and forms OPNAV 3430/2 and OPNAV 3430/3.
- 3. Applicability. This instruction applies throughout the U.S. Navy and Marine Corps. It applies to all supporting intelligence, logistics, communications, procurement and acquisition agencies.
- 4. Scope and purpose. The EWRL process is not an end in itself. If properly employed, the EWRL process can provide a systematic, decision making tool to direct Navy and Marine Corps combat actions in response to an unexpected enemy action. The EWRL process must provide the interface, coordination and integration

of Navy and Marine Corps forces in support of peacetime, contingency, and wartime operations. The EW reprogramming process provides operational commanders with a timely and accurate means to respond to previously unknown enemy threat parametric changes and unique theater or mission threat requirements to enhance total force capability and survivability. The reprogramming process can include changes in tactics, support operations, EW equipment software and hardware, and changes in support equipment and other support systems (e.g., training devices, threat simulators, etc.)

- 5. <u>Policy statement</u>. Chief of Naval Operations EWRL goals are as follows:
- a. To effectively counter hostile Wartime Reserve Modes (WARM) and to maintain a vigilant intelligence review effort in order to minimize the impact of threat WARM on Navy/Marine Corps reprogrammable EW systems (e.g., radar warning receivers (RWR), electronic countermeasures (ECM) systems, and weapons requiring EW parametrics).
- b. Establish procedures throughout all command levels to ensure existing and future EWRL capabilities are fully considered, coordinated and supported.
- c. Establish and maintain an effective capability to assemble, identify, correlate, and disseminate tactical and technical electronic intelligence (ELINT) information during peacetime and hostilities involving low intensity conflict or wartime.
- d. Establish an effective and responsive WARM threat analysis capability.
- e. Establish capability to translate ELINT into a common format that can be compared to specific EWRL system capabilities.
- f. Establish timely, secure, and survivable means to transmit reprogramming change information worldwide to deployed Navy and Marine Corps units (enclosure (2) germane).
- g. Efficiently use research, development, test, and evaluation (RDT&E) resource in designing future EW reprogrammable systems and related support equipment.

h. Establish and maintain an accurate and timely data base to provide intelligence and operations parametric data to support EW reprogramming and EW planning systems.

## 6. Functional responsibilities (See enclosure (4))

## a. Chief of Naval Operations (CNO) (OP-944)

- (1) Provide overall management of the Navy's EWRL process.
- (2) Provide requirements to the cognizant systems command for the development of new systems and the conversion of existing systems to improve standardization and promote commonality.
- (3) Maintain liaison with the Joint Chiefs of Staff (JCS) and other services/agencies to ensure that, where possible, the EWRL program is integrated with similar efforts throughout the Department of Defense.
- (4) Provide guidance and direct the efforts of the Electronic Warfare Operational Programming Facility (EWOPFAC). Forward validated EWOPFAC operational requirements and funding support to Commander, Space and Naval Warfare Systems Command (COMSPAWARSYSCOM) (enclosure (3) germane).
- (5) Include EW reprogramming in fleet and joint exercises.

## b. Chief of Naval Operations (OP-02, 03, 05)

- (1) Fulfill requirements of resource sponsorship for electronic warfare systems support, including support for library development through the EWRL program.
- (2) Provide for validation and forwarding of Tactical Systems Support Center/Software Support Activity (TSSC/SSA) EWRL support requirements and funding to COMSPAWARSYSCOM (enclosure (3) germane).

## c. Fleet Commander in Chief (FLTCINC)

(1) Approve content of EW libraries for areas of responsibility.

- (2) Determine specific libraries needed for each naval operating area and optimum frequency of update.
- (3) Establish priorities among different system libraries.
- (4) Approve and submit geo-tailored EW library requirements to OP-944 for funding coordination with platform sponsors (enclosure (3) germane).
- (5) Approve threat listings, friendly and non-hostile signals, and their priority in both embedded and field reprogrammable libraries.
- (6) Approve dissemination of new/updated engineered libraries and operator aids.
  - (7) Include EW reprogramming in fleet/joint exercises.

### d. COMSPAWARSYSCOM

- (1) Provide program management and data/systgems engineering for the EWRL program in accordance with validated OPNAV EWRL requirements (enclosure (3) germane).
- (2) Develop, test, and procure hardware and software to establish and maintain an EW Support System (EWSS) with an integrated Automated Data Processing (ADP) and communications architecture. Navy Warfare Tactical Data Base (NWTDB) (reference (a) germane), COPERNICUS (reference (b) germane), and Space and Electronic Warfare (SEW) initiatives will be considered during evolution of the EWSS to ensure that current and future Navy EW related support can be fulfilled as requirements are identified.
- (3) Develop interfaces to the SEW support console within the NTCS-A program which will provide the capability to support deployed tactical commanders' ability to incorporate rapid changes to battle group EW assets in response to a threat. Reprogramming interfaces from various deployed EW systems must be integrated into the EWSS and NTCS-A systems. COMSPAWARSYSCOM shall provide a common architecture and suitable means for disseminating tactical EW data to deployed battle group commanders.

- (4) Act as designated Configuration Control Board Chairperson for EWSS hardware and software changes or modifications (enclosure (3) germane).
- (5) Provide Integrated Logistics Support (ILS) and training for the EWSS through an applicable Navy support activity.

## e. Commanders, Systems Commands

- (1) Administer, oversee performance of, and provide resources for TSSCs/SSAs to support specific reprogrammable EW systems.
- (2) Notify OP-944 of research and development, new production, or modification to EW systems requiring EWRL support and include EWRL coordination in system developmental milestone process.
- (3) Ensure system design practices are consistent with EWRL support program policy (paragraph 5) and integrated with EWSS development.
- f. <u>Tactical System Support Centers/Software Support Activities (TSSCs/SSAs)</u>
- (1) Produce engineered libraries from formatted parametrics in accordance with operational support requirements.
- (2) Perform engineering analysis for validation and verification to ensure compatibility with other EW systems, correct signal identification, and appropriate response.
- (3) Document procedures required for testing and reprogramming libraries.
- (4) Participate in Library Production Working Groups (LPWG's) as required (enclosure (4)).
- (5) Upon LPWG/EWOPFAC certification and FLTCINC approval, distribute engineered libraries. Provide library supporting documentation that includes a narrative summary of modified EW capabilities, operator-oriented instructions/clarification, and technical material for implementing the change.
- (6) Maintain documentation for specific EW system library configurations.

- (7) Identify EWRL support requirements to cognizant systems command for coordination with program sponsor, validation, funding, and forwarding to COMSPAWARSYSCOM (enclosure (3) germane).
- (8) Provide support to fleet and joint reprogramming exercises.
- g. <u>Commander, Naval Security Group</u>. Task Naval Security Group Activity (NSGA), Charleston, SC to provide U.S. Navy emitter data to EWRL producers.
- h. <u>Naval Research Laboratory (NRL) and Naval Air Warfare</u>
  <u>Center (NAWC)</u>
- (1) Develop, evaluate, and provide algorithmic descriptions of ECM techniques to appropriate TSSCs/SSAs for surface and tactical air EW reprogrammable systems.
- (2) When research reveals new threat systems vulnerabilities, capabilities, and/or new electronic parameters, ensure EWOPFAC is included in distribution of this new information.

## i. EWOPFAC

- (1) Report to CNO (OP-944) for EWRL support program direction, requirements validation, and funding support (enclosure (3)).
- (2) Act as primary liaison and central point of contact for the Navy EWRL Support Program. Provide additional program oversight to ensure satisfaction of FLTCINC EW systems support requirements (enclosure (4)).
- (3) Liaison with producers of other EW data bases such as those resident at Intermediate Processing Centers (IPCs), National Security Agency (NSA), Defense Intelligence Agency (DIA), Scientific and Technical Intelligence (S&TI) centers, and NSGA Charleston.
- (4) Coordinate with NSGA Charleston for U.S. Navy parametric and emitter/platform fit data requirements.
- (5) Compile, update, process and distribute the all-source Navy Emitter Reference File (NERF).

- (6) Coordinate with TSSCs, SSAs, and other activities as required for EWRL training.
- (7) Assist FLTCINC in determining requirements for EW libraries, library content, update requirements, and priorities among EW systems (see para 6j(1)).
- (8) To the extent possible, ensure use of NERF data in developing formatted parametrics in direct response to FLTCINC requirements. Supplement NERF data with all source data as necessary to complete library requirements and resolve threat ambiguities.
- (9) Coordinate rapid reprogramming support as required by the FLTCINC (enclosures (2) and (3)).
- (10) Develop, maintain, and distribute the Standardized Platform Abbreviation Listing (SPAL) which will provide the EWRL support program with a common, standardized listing of 4, 6, 8, 12, and 20 character platform abbreviations.
- (11) Develop, maintain, and distribute the Standardized Emitter Abbreviations Listing (SEAL) which will provide the EWRL support program with a common, standardized listing of 4, 6, 8, 12, and 24 character emitter abbreviations.
- (12) Establish aggressive EW flagging program to ensure integrity and accuracy of worldwide EWRL libraries and data bases.
- (13) Prepare annually and submit to DIA the EWRL Program's Intelligence Production Requirements (IPR's), ensuring coordination for FLTCINC input.
- (14) Act as Functional Data Base Manager for the Radar Parameters Data Set (RAPADS) portion of NWTDB.
- j. <u>Electronic Warfare Operational Programming Detachment</u>
  Pacific (EWOPDET PAC)
- (1) Officer in Charge (OIC), EWOPDET PAC will report to the Commander in Chief, U.S. Pacific Fleet (CINCPACFLT) for EWRL support to formally supported PACFLT EWRL systems (enclosure (5) germane).

- (2) EWOPDET PAC will respond to EWOPFAC tasking for library support to developmental/test and evaluation systems, and matters pertaining to EWRL program oversight (data standards, processing strategies, etc.).
- k. <u>Director of Navy Test and Evaluation and Technology</u>
  Requirements (OP-091)
- (1) Ensures that acquisition directives provide for the design and incorporation of WARM resistant, rapidly reprogrammable EW systems, to include support equipment and reprogramming tools.
- (2) Ensures computer support hardware and software required for reprogramming EW systems are developed, tested, and procured as part of the acquisition process.
- 1. Navy International Programs Office (NIPO). Provide specific guidance on, and coordinate release of, EW library data to foreign governments.

## m. Fleet Units

- (1) Use enclosure (6) to report any library discrepancies and provide feedback.
- (2) Submit recommendations for EWRL improvements to FLTCINC (info EWOPFAC) via the chain of command.

## n. <u>Intermediate Processing Centers</u>

- (1) Provide WARM validation during hostilities to EWOPFAC/DET PAC in accordance with DIA DIMD DDB-1730-72-90 "Joint Policy and Procedures for Intelligence Support to Electronic Warfare (EW) Programming."
- (2) Provide and maintain theater specific data (e.g., theater unique OOB) in support of the EWRL Support Program.
- 7. <u>Formally supported systems</u>. Enclosure (5) identifies those EW systems formally supported by the EWRL Support Program. Enclosure (7) discusses organizational roles and responsibilities as they pertain to routine library maintenance/updating. Enclosure (2) illustrates the rapid reprogramming process.

8. Report. Symbol OPNAV 3430-3 is assigned to the reporting requirement addressed in paragraph 6m(1) and enclosure (6) and is approved for 3 years from the date of this directive.

JERRY O. TUTTLE

Director,

Space and Electronic Warfare

eny O. Tuttle

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## EWRL DEFINITIONS

**AFEWC** 

Air Force Electronic Warfare

Center

DTA

Defense Intelligence Agency

Embedded Library

That part of the EW library that is provided by the TSSC/SSA and cannot be changed or modified by

the equipment operator.

Engineered Library

Produced by the TSSC/SSA from formatted parametrics. It is integrated into the specific system operational program, tested, validated, and provided directly to the fleet user.

EW

Electronic Warfare

EW Integrated Reprogramming

(EWIR) Data Base

DIA sponsored Joint EW data base produced by the service S&TI Centers, NSGA Charleston, and AFEWC, including supplemental Blue and Grey emitter, and distributed by FTC to support reprogramming

requirements.

EWIR

EW Integrated Reprogramming.

EW Library List

Prioritized emitter list containing signals of interest for a particular EW system.

EWOPDET PAC

EW Operational Programming Detachment Pacific

EW Operational Programming Detachment Pacific (EWOPDET PAC)

EW Operational Programming

Theater organization subordinate to CINCPACFLT for theater specific EW systems support.

Facility (EWOPFAC)

Navy Central point of contact for EWRL matters.

**EWOPFAC** 

EW Operational Programming Facility

Enclosure (1)

EW Reprogrammable Systems

Computer controlled or automated

EW systems that have

reprogrammable software or

firmware update capabilities. For purposes of this instruction, only non-communication systems are

considered.

**EWRL** 

Electronic Warfare Reprogrammable

Libraries

**EWSS** 

EW Support System

EW Support System (EWSS)

Field Reprogrammable Library

That library, or part of the EW library, that can be reprogrammed

in the field.

Formatted Parametrics

Parametrics, formatted in accordance with system specific rules, derived from the Naval Emitter Reference File (NERF) to correlate with the EW library

list.

FTC

Foreign Technologies Center,

Wright-Patterson AFB.

KILTING

NSA technical data base containing

observed signal parameters.

Naval Emitter Reference File (NERF)

All-source emitter data base for developmental and training applications and generation of worldwide EW system libraries. contains friendly, non-hostile, and threat parametrics, and

electronic order of battle data.

NERF is a compilation of existing

EW data, primarily EWIR, in the

format required to support Navy EW

systems.

NERF

Navy Emitter Reference File

Enclosure (1)

## OPNAVINST 3430.23B 1 2 JUN 1992

National Security Agency NSA

NWTDB Naval Warfare Tactical Data Base

Radar Parametrics Data Set **RAPADS** 

Rapid Reprogramming Reprogramming of engineered libraries to counter change in

threat signal environment or characteristics in response to rising tensions, crisis, or war.

Scientific and Technical S&TI

Intelligence

Standard Emitter Abbreviation List SEAL

Software Support Activity Organizations subordinate to Navy (SSA)

Systems Command who develop, test, validate, and distribute

engineered libraries to Fleet

users.

Standard Platform Abbreviation SPAT.

List

SSA Software Support Activity

Organizations subordinate to Navy Tactical Systems Support Center (TSSC)

Systems Command who develop, test, validate, and distribute

engineered libraries to Fleet

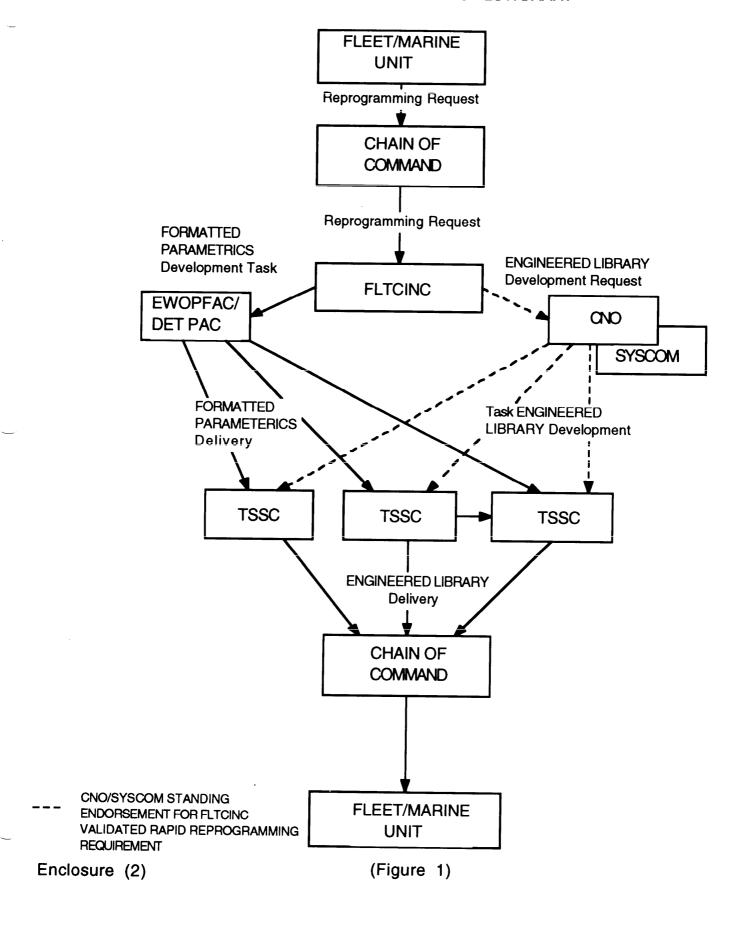
users.

Tactical Systems Support Center TSSC

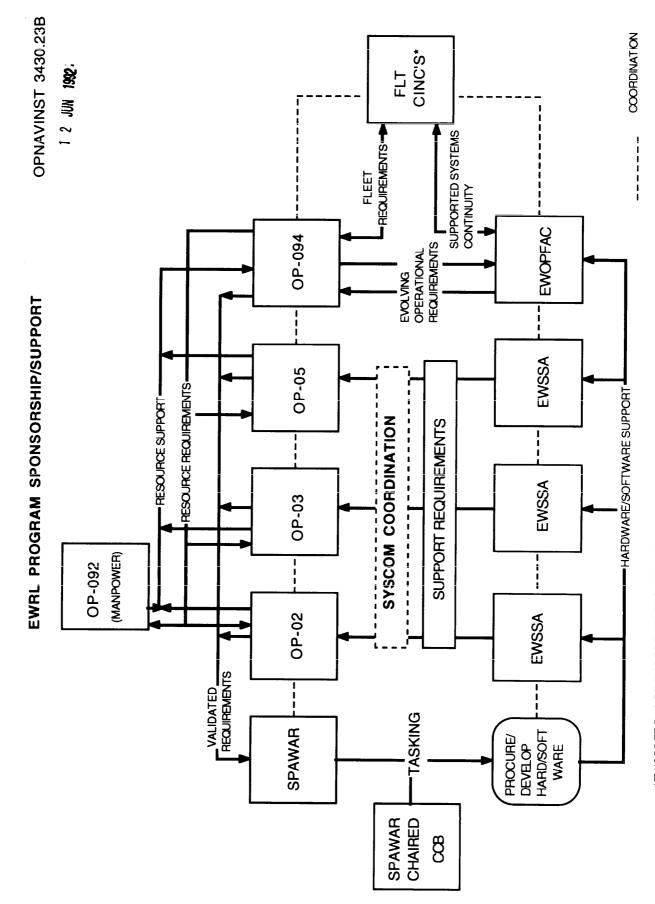
## EWRL Library Rapid Reprogramming

- 1. <u>Purpose</u>. This enclosure provides guidance for requesting rapid reprogramming and/or additional libraries required for low intensity conflict or wartime. For normal operations see enclosure (7).
- 2. <u>Discussion</u>. Requests for rapid reprogramming can originate from Fleet units or higher in the chain of command (see figure (1)). Unit requests should be made to the FLTCINC via chain of command. EWOPFAC/DET PAC, the appropriate TSSC/SSA, System Command and CNO should be information addees. (Note: EWOPFAC will begin immediately to coordinate library development pending formal tasking). After the FLTCINC has approved the requested reprogramming action, the EWOPFAC/DET PAC will finalize the formatted parametrics and the TSSC/SSA will deliver the engineered library via the fastest means.
- 3. Organic Reprogramming. Fleet units with organic capability reprogramming will continue to manipulate libraries in response to their specific tactical requirements. EWOPFAC/DET PAC and the appropriate TSSCs/SSAs will be notified by message of all fleet entered data changes that fall outside EPL parameters or the addition of new ELNOTS.
- 4. Message changes. For SLQ-32 and WLR-1H equipped ships, only library changes received via AIG 392 (LANT) and AIG 11061 (PAC) have been coordinated and approved by FLTCINCs and theater chains of command. These changes take precedence over changes received from any other source. Library changes promulgated in this manner will be serialized using the last two digits of the calendar year followed by a dash and sequential numbering corresponding to the change being issued in that calendar year (e.g., 91-1 would be the first change of calendar year 1991). Additionally, all numerical data will include checksum validation.
- 5. Figure (1) diagrams the rapid reprogramming support process. Note that in emergency situations requiring rapid reprogramming, CNO/SYSCOM have provided standing endorsement upon FLTCINC approval.

## **EWRL RAPID REPROGRAMMING FLOWCHART**



19041444-6399/64



\*EWOPDET PAC PROVIDES THEATRE-SPECIFIC/EWRL SUPPORT TO CINCPACFLT

# EWRL PROGRAM FUNCTIONAL RESPONSIBILITIES

## Respond to stated require-Resource support ments

CNO (0P-94)

Validate EWOPFAC hard/ forward to COMSPAWAR procurement ramts and software, acquistion/

## (OP-02/04/05) CNO

-Respond to stated require-Resource support ments

-Validate TSSC/SSA hard/ orward to COMSPAWAR procurement remts and software, acquistion/

## NAVAIR

-Respond to stated require-·Validate TSSC/SSA hard/ -Resource support ments

procurement ramts and software, acquistion/ orward to CNO

# OPNAVINST 3430.23B

-Respond to stated require--Resource support ments

-Validate TSSC/SSA hard/ procurement remts and software, acquistion/ forward to CNO

# COMSPAWARSYSCOM

-Hardware/software configuration management

Software development

-Hardware acquisition/procurement Responds to CNO validated

requirements

-Engineered library final -Prioritized ELNOT list approval authority

> -Central POC for EWRL -Disseminate FME data -Exercise coordinator

FLTCINC

-EWRL Program oversight

-WARM validation

PC

-Theatre EOB -Unique OOB

-NERF Generation -EW Flagging

**EWOPFAC** 

-Number/content of libraries -Reprogramming decisions -Frequency of updates

-Identify support require-

program sponsor for ment and forward to

-SEAL/SPAL

validation

## TSSCs/SSAs

-Define system operational capabilities -Extract data (EWIR, KILTING, etc.) to Program Sponsor for validation -Identify support requirements

-Quality assurance

EWOPFAC/EWOPDET PAC

-Library working

parameters, NERF, EWIR, -Extract data (Value added

EPL, KILTING, etc.)

group member

Coordinate final approval of

engineered library with

**FLTCINC** 

Document ambiguities

-Develop engineered libraries from formatted parametrics

-Perform system integration -Develop simulation

-Disseminate FME -Platform test

-Develop symbology data

-Quality assurance -Library working

Distribute libraries group member

# FAC/DET/SSA LIBRARY PRODUCTION WORKING GROUPS

-Jointly validate final parametric -Coordinate change requirements content of tactical library

-Provide feedback to FAC DB

## EWRL PROGRAM SUPPORTED SYSTEMS

## FORMALLY SUPPORTED

SYSTEM	TSSC/SSA	SPONSOR
AGM-88 (HARM) AN/ALQ-126B AN/ALQ-165 ASPJ AN/ALR-45F AN/ALR-66A(V)1 AN/ALR-666(V)2 AN/ALR-66A(V)3 AN/ALR-66(V)6 AN/ALR-67 AN/ALR-73 AN/ALR-76 AN/ALR-76 AN/APR-43 AN/SLQ-17A(V)2 AN/SLQ-17A(V)2 AN/SLQ-16 AN/WLQ-16 AN/WLR-1H(V)1 AN/WLR-1H(V)3	NAWC CL NAWC PM NAWC PM NAWC PM NAWC PM NAWC PM NAWC PM GENERAL INST NAWC PM FCDSSA CA NAC IN NAWC PM HUGHES ACFT NAVSWC VA NESEC SC NESEC CA NESEC IN NESEC IN	SPONSOR  OP-05 PMA-242 OP-05 PMA 253 OP-05 PMA-272 OP-05 PMA-253 OP-05 PMA-274 OP-05 PMA-274 OP-05 PMA-240 OP-05 PMA-240 OP-05 PMA-240 OP-05 PMA-253 OP-05 PMA-253 OP-05 PMA-231 OP-05 PMA-231 OP-05 PMA-253 OP-05 PMA-253 OP-05 PMA-244 OP-05 PMA-253 OP-07 O6W1 OP-07 O6W2 OP-07 O6W2 OP-07 O6W2
AN/WLR-8(V)2/5 AN/WSQ-5 AN/WYQ-2 TYPE 18 ADF	NESEC CA NSG VA/HI NESEC CA NSB NEW LONDON	OP-02 06W2 OP-092 G52 OP-02 06W2 OP-02 06W2

## INFORMALLY SUPPORTED

SYSTEM	TSSC/SSA	SPONSOR
AN/ALE-47	NAWC PM	OP-05 PMA-253
AN/ALQ-142	NADC PA	OP-05 PMA-266
AN/ALQ-162	NAWC PM	OP-05 PMA-253
AN/ALR-66(V)4	NAWC PM	OP-05 PMA-271
AN/ALR-67 ASR	NAWC CL	OP-05 PMA-253
AN/APR-39A(V)1	NAVSWC VA	TBD
AN/WLR-8 HPI	NESEC CA	OP-02 06W1

## TSSCs/SSAs

APL JHU	-	Applied Physics Laboratory, John Hopkins University
FCDSSA CA	-	Fleet Combat Direction Systems Activity, San Diego, CA
GENERAL INST	-	General Instruments, Hicksville, NY
HUGHES ACFT	-	Hughes Aircraft Corporation, Fullerton, CA
NAWCAD IN	-	Naval Air Warfare Center Aircraft Division, Indianapolis, IN
NAWCAD PA	-	Naval Air Warfare Center Aircraft Division, Warminster, PA
NAVSWC VA	-	Dahlgren Division, Naval Surface Warfare Center, Dahlgren, VA
NAWCWD CL CA	-	Naval Air Warfare Center, Weapons Division, China Lake, CA
NAWCWD PM CA	-	Naval Air Warfare Center, Weapons Division, Point Mugu, CA
NESEC CA/SC	-	Naval Electronic Systems Engineering Center, San Diego, CA, and Charleston, SC
NSB New London	-	Naval Submarine Base, New London, CT
NSG VA/HI	-	Naval Security Group - Norfolk, VA and Pearl Harbor, HI

## CLASSIFICATION (UNCLASSIFIED UNTIL FILLED IN)

1 2 JUN 1992

## ELECTRONIC WARFARE REPROGRAMMABLE LIBRARY FEEDBACK REPORT

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## EWRL Library Maintenance/Updates

- 1. <u>Purpose</u>. This enclosure provides guidance for making routine changes to an EWRL supported library.
- 2. <u>Discussion</u>. The reprogrammable libraries are the product of many contributors. EWOPFAC/DET PAC reviews the current EW library list and provides the FLTCINC with recommended changes based on operator feedback (enclosure (6) germane), changes in threat, and other sources. Review periods/update cycles are established by the FLTCINC for each system. After the FLTCINC approves a recommended EW library list, the EWOPFAC/DET PAC will determine the parametrics used to develop the formatted This data is primarily derived from the NERF, but parametrics. is modified to fit the requirements/limitations of the system. The TSSCs/SSAs then use the formatted parametrics to develop the engineered library, optimizing the capability of the system to respond correctly to signals. At least once during the production cycle, a Library Producer's Working Group (LPWG) is convened between EWOPFAC, EWOPDET PAC, and the TSSC/SSA to jointly validate the system library and ensure NERF compatibility. The EWOPFAC/DET PAC will then recommend approval of distribution for the engineered library to the FLTCINC. Upon FLTCINC approval, the TSSC/SSA will forward the updated engineered library to fleet users. Thereafter, EWOPFAC will perform continuous EW flagging against the library, and will also review user feedback. Changes necessitated by flagging or feedback will be presented to the FLTCINCs. The EWOPFAC functions as a clearing house for data from diverse sources, and prior to recommending or presenting any change will first coordinate with the TSSCs/SSAs to ensure system compatibility.
- 3. Organic Reprogramming. Fleet units capable of organic system reprogramming will manipulate libraries in response to their specific tactical requirements. Feedback, using enclosure (6), is required as follows:
- a. <u>Parametric changes</u>. All fleet entered data changes that fall outside EPL parametrics will be submitted to the EWOPFAC with copies to the EWOPDET PAC and the appropriate TSSC/SSA for analysis and validation. EWOPFAC will provide confirmation to the submitting unit.

- b. <u>Signal additions/deletions</u>. Fleet requests for the addition/deletion of ELNOTS or other signals of interest to the embedded library will be submitted to the EWOPFAC with copies to the appropriate FLTCINC and EWOPDET PAC for analysis, and possible inclusion in/removal from subsequent library updates.
- c. <u>Major changes/new areas</u>. Requirements for major changes or new geo-tailored areas will be submitted to EWOPFAC/DET PAC with copies to the FLTCINC, info chain of command.
- 4. <u>Non-organic Reprogramming</u>. Most systems today require extensive engineering to be reprogrammed. This should not, however, deter fleet user from requesting changes as required for optimum support to fleet operations. For most systems, requested changes can be incorporated in the next update cycle.